

REMARKS

This Response is filed in response to the Office Action dated November 26, 2007.

Upon entry of this Response, claims 1-4, 6-11, 14-20, 30 and 31 will be pending in the Application.

In the outstanding Office Action, the Examiner rejected claims 1-4, 6-11, 14-16, 18-20, 30 and 31 under 35 U.S.C. 102(b) as being unpatentable over Ernest (US Pat. No. 4,816,103), hereinafter referred to as "Ernest", and rejected claim 17 under 35 U.S.C. 103(a) as being unpatentable over Ernest in view of Serafini (International Publication No. WO 02/095157 A1), hereinafter referred to as "Serafini".

Claims 1, 30 and 31 have been amended to more clearly distinguish the claims over the applied art. Support for the amendments can be found at least at paragraph [0027] of the Specification as originally filed, and is also contained throughout the disclosure. Applicant asserts no new matter is added.

Rejection under 35 U.S.C. 102(b)

A. Claims 1-4, 6-11, 14-16, 18-20, 30 and 31

The Examiner rejected claims 1-4, 6-11, 14-16, 18-20, 30 and 31 under 35 U.S.C. § 102(b) as being unpatentable over Ernest.

Specifically, the Examiner stated that

With respect to Claims 1, 30, and 31, Ernest teaches a press with upper and lower mold platens 18 and 20, with each mold section having a resilient silicone rubber resistance heater 32 (an upper platen and a heated lower platen that are selectable movable toward and away from each other for conformally but nondeformably receiving a vessel therebetween; wherein the heated lower platen heats a portion of the vessel to at least a predetermined temperature; wherein the heated lower platen heats a portion of the vessel to at least a predetermined temperature) (see col. 4, lines 1-16), for curving wood, composites, or veneers (an air handling unit vessel) (see col. 1, lines 5-13). The upper mold platen is an upper hinged mold platen assembly of upper

corrugated mold platens 20a,b,c,d with hinges fastened on either side (wherein the upper platen comprises at least two movable portions that are hingedly connected; an upper platen comprising at least two movable portions; one of the at least two movable portions may be rotated independently of the remaining portions of the at least two movable portions) (see col. 5, lines 45-63). Since the press is capable of being used by filling the pressed material, it meets the use limitations of the claim (so that vessel surfaces in conformal contact with the upper platen and the lower platen remain substantially undeformed while the vessel is filled with a pressurized material).

With respect to Claims 2-4 and 8, Ernest teaches a press for curving wood, composites, or veneers (see col. 1, lines 5-13), which would enable the press to be used for the claimed use limitations of the press.

With respect to Claims 6, 7, and 9-11, Ernest teaches each mold section having a resilient silicone rubber resistance heater 32 (wherein the heated lower platen is heated by heated fluid; heated by heating elements) (see col. 4, lines 1-16).

With respect to Claims 14, the upper mold platen is an upper hinged mold platen assembly of upper corrugated mold platens 20a,b,c,d with hinges fastened on either side (wherein one of the at least two movable portions may be rotated independently of the remaining portions of the at least two movable portions) (see col. 5, lines 45-63).

With respect to Claims 15 and 16, Ernest teaches that the mold platens have aligned curves (where in graduated indicator having at least one graduated indication corresponding to a feature of the vessel is used to position the at least two movable portions; wherein the feature of the vessel is the length of the vessel) (see col. 4, lines 25-31).

With respect to Claims 18-20, Ernest teaches using retraction cylinders 6, piston rods 25, and double convoluted pneumatic actuators 4 to control the platens' position and necessarily their relative rotation to each other about their hinges (see further comprising at least one device associated with a hinged connection to selectively

prevent rotational movement in a predetermined direction of one of the at least two movable portions; where the at least one device is a cam; activated by an activator) (see col. 3, lines 33-67).

Applicants respectfully traverse the rejection of claims 1-4, 6-11, 14-16, 18-20, 30 and 31 under 35 U.S.C. § 102(b).

The Examiner is reminded that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.’ *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).” *See* Manual of Patent Examining Procedure, 8th Edition (MPEP), Section 2131.

In addition, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.’ *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).” *See* MPEP, Section 2131.

Ernest, as understood, is directed to a method and apparatus for forming corrugated plywood composites. The apparatus includes an upper hinged mold platen and a lower platen. The upper platen is hinged to allow the upper platen to apply a sequential articulated pressure (col. 5, lines 45-63 and col. 7, lines 51 to col. 8, lines 31).

In contrast, amended independent claim 1 includes the limitation:

"wherein the upper platen comprises at least two movable portions that are hingedly connected and configured to apply a conformal pressure to the surfaces of the roof assembly in contact with the upper platen with a force insufficient to deform the roof assembly surfaces while applying a reactive force to the surfaces of the roof assembly in contact with the upper platen while the vessel is filled with a pressurized material".

Furthermore, amended independent claim 30 includes the limitation:

"the at least two movable portions are hingedly connected and configured to apply a conformal pressure to the surfaces of the roof assembly in contact with the upper platen with a force insufficient to deform the roof assembly surfaces while applying a reactive force to the surfaces of the roof assembly in contact with the upper platen while the vessel is filled with a

pressurized material and one of the at least two movable portions may be rotated independently of the remaining portions of the at least two movable portions".

Additionally, amended independent claim 31 includes the limitation:

"by applying a conformal pressure to the surfaces of the roof assembly in contact with the upper platen with a force insufficient to deform the roof assembly surfaces while applying a reactive force to the surfaces of the roof assembly in contact with the upper platen".

Several of the features recited by Applicant in independent claims 1, 30 and 31 are not taught or suggested by Ernest.

Ernest does not disclose a press that includes hinged portions that apply a conformal pressure with a force insufficient to deform the roof assembly surfaces while applying a reactive force to the surfaces of the roof assembly. Ernest discloses a press that includes hinged portions that apply a pressure to press a plywood or other substrate into a desired shape. The press of Ernest is not capable of operating as the press of the instant disclosure, in both the physical structure of the apparatus or the method of operation.

Dependent claims 2-4, 6-11, 14-16 and 18-20 are believed to be allowable as depending from what are believed to be allowable independent claim 1 for the reasons given above. In addition, claims 2-4, 6-11, 14-16 and 18-20 recite further limitations that distinguish over the applied art. In conclusion, it is respectfully submitted that claims 1-4, 6-11, 14-16, 18-20, 30 and 31 are not anticipated by or obvious over Ernest and therefore are allowable.

B. Claim 17

The Examiner rejected claims 17 under 35 U.S.C. § 103(a) as being unpatentable over Ernest in view of Serafini.

Specifically, the Examiner stated that

With respect to Claim 17, Ernest teaches a press as recited above but does not expressly teach that the press further comprises a plurality of rollers extending through the lower platen for receiving the vessel between the upper platen and the lower platen.

Serafini teaches incorporating rollers into the lower portion of a mold in order to convert to rolling friction the friction of moving the shaped material within the mold (see page 4, lines 4-22 and figs. 3 and 4). The rollers are within the generatrix of the curve, which would necessarily extend them through the lower platen.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Serafini's rollers in the mold of Ernest in order to minimize friction (see Serafini, page 4, lines 4-22).

Applicants respectfully traverse the rejection of claim 17 under 35 U.S.C. § 103(a).

As an initial matter, “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination.” See Manual of Patent Examining Procedure, 8th Edition (MPEP), Section 2143.01.

The Examiner is reminded that “[i]f the proposed modification or combination of the prior art would change the principle or operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” See MPEP, Section 2143.01.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

See Manual of Patent Examining Procedure, 8th Edition (MPEP), Section 2143.03.

Additionally, the following principle of law applies to all Section 103 rejections. MPEP 2143.03 provides “To establish prima facie obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).” [emphasis added] That is, to have any expectation of rejecting the claims over a single

reference or a combination of references, each limitation must be taught somewhere in the applied prior art. If limitations are not found in any of the applied prior art, the rejection cannot stand. In this case, the applied prior art reference, applied individually, clearly do not arguably teach some limitations of the claims.

The previous discussion of Ernest is equally applicable herein.

Serafini, as understood, is directed to a preform suitable for resin transfer molding, and does nothing to cure the deficiencies of the rejection as discussed above.

Dependent claim 17 is believed to be allowable as depending from what is believed to be allowable independent claim 1 for the reasons given above. In addition, claim 17 recites further limitations that distinguish over the applied art. In conclusion, it is respectfully submitted that claim 17 is not anticipated nor rendered obvious by Ernest and is therefore allowable.

CONCLUSION

In view of the above, Applicant respectfully requests reconsideration of the Application and withdrawal of the outstanding objections and rejections. As a result of the amendments and remarks presented herein, Applicant respectfully submits that claims 1-4, 6-11, 14-20, 30 and 31 are in condition for allowance. As the claims are not anticipated by nor rendered obvious in view of the applied art, Applicant requests allowance of claims 1-4, 6-11, 14-20, 30 and 31 in a timely manner. If the Examiner believes that prosecution of this Application could be expedited by a telephone conference, the Examiner is encouraged to contact the Applicant.

The Commissioner is hereby authorized to charge any additional fees and credit any overpayments to Deposit Account No. 50-1059.

Respectfully submitted,
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